



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

SECOND SEMESTER – APRIL 2019

CH 2506– CHEMISTRY OF HYDROCARBONS

Date: 02-04-2019
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART-A

Answer ALL the questions.

(10 x 2 =20)

1. Define hybridization.
2. What is heterolytic bond fission?
3. What is cracking? Give one example.
4. How is cycloalkane prepared by Wurtz reaction?
5. State Saytzeff's rule.
6. What is Ziegler-Natta catalyst?
7. How will you prepare propanaldehyde from propyne?
8. What are the products obtained on oxidation of 2-pentyne with alkaline KMnO_4 ?
9. Why is benzene more readily nitrated than nitrobenzene?
10. Write any two synthetic applications of naphthalene.

PART-B

Answer any EIGHT questions.

(8 x 5 =40)

11. Explain steric effect with suitable examples.
12. Explain the relative stability of primary, secondary and tertiary carbanions.
13. Write a note on free radical halogenation of alkanes.
14. Discuss Corey –House synthesis and its mechanism.
15. Describe any three ring opening reactions of cycloalkanes.
16. Write a note on stability of conjugated dienes.
17. Give any two methods of preparation of alkenes.

